

REMARKS

Reconsideration of the above-identified application in view of the preceding amendments and the following remarks is respectfully requested.

Claims 1-21 are pending in the subject application. Claims 1-8 have been withdrawn as being directed to non-elected subject matter. Claims 9-19 have been amended. Claims 20 and 21 are new to this application.

No new matter has been added to the subject application by this Amendment nor have any new issues been raised. Support for all of the amendments set forth herein is found throughout the written specification and drawings.

AFFIRMATION OF ELECTION

This application is subject to an election/restriction requirement under 35 U.S.C. §121. In particular, restriction was required to one of the following inventions:

Group I. Claims 1-8, drawn to a cannula assembly; and
Group II. Claims 9-19, drawn to a method of maintaining an operative pneumoperitoneum.

On June 2, 2006, applicants' former representative provisionally elected, without traverse, the invention of Group II, Claims 9-19. Applicants hereby affirm the election of this subject matter for prosecution on the merits.

CLAIM REJECTIONS

Rejection Under 35 U.S.C. §102(b)

In the Office Action, Claims 9-12, 15, 17 and 19 were rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,544,210 to Trudel et al.

Trudel et al. disclose in Fig. 1 a schematic view of a laparoscopic surgical site showing a smoke clearing device 10 utilized in conjunction with three trocar assemblies 28, 30 and 32. Trocar assembly 28 houses a laser instrument 34. An annular channel 36 within trocar 28 provides a passage for gas drawn out of the patient cavity 24 to the smoke clearing device 10. Trocar assembly 30 has as a channel 49 for a fiber optic camera 38 and the channel also provides an annular inlet passage for insufflation gas from an insufflator 40. Trocar assembly 32 provides a channel 42 for returning filtered gas from the smoke clearing device 10 and it may also serve as a channel for an additional surgical instrument 44. Trudel et al. do not disclose or even remotely suggest that pressurized insufflation gas or even filtered gas from the smoke clearing device can be introduced into the patient cavity 24 by directing the pressurized gas through a surgical instrument, such as instrument 44, camera 38 or even laser 34.

In contrast, amended Claim 9 of the subject application provides a method of maintaining an operative pneumoperitoneum that includes, among others, the steps of introducing a trocar through an abdominal wall of a patient, introducing a surgical instrument through a lumen in the trocar, introducing a pressurized gas into the surgical instrument and directing the pressurized gas from the surgical instrument into the patient through a passageway between the surgical instrument and a wall of the lumen in the trocar. Trudel et al. do not disclose or suggest such a method or a system for performing such a method. In particular, Trudel et al. do not disclose or suggest directing pressurized gas from a surgical instrument in the lumen of a trocar into a patient through a passageway between the surgical instrument and a wall of the lumen in the trocar. Rather, Trudel et al. simply disclose introducing insufflation gas and filtered gas through

two trocars at a surgical site. There is no gas introduced into the patient cavity through the instruments associated with the trocars.

Similarly, amended Claim 15 of the subject application provides a method of maintaining an operative pneumoperitoneum that includes, among others, the steps of introducing a trocar through a portion of an abdominal wall of a patient at a first site, introducing a surgical instrument through a lumen in the trocar, introducing a pressurized gas into the surgical instrument, directing the pressurized gas from the surgical instrument into the patient through a gas passageway between the surgical instrument and a wall of the lumen, sealing the passageway between the surgical instrument and the wall of the lumen, introducing a cannula through the abdominal wall of the patient at a second site, monitoring gas pressure within the abdomen of the patient through the cannula, and controlling gas pressure within the abdomen of the patient based on feedback from the cannula. Trudel et al. do not disclose or suggest such a method or a system for performing such a method. In particular, Trudel et al. do not disclose directing pressurized gas from a surgical instrument in the lumen of a trocar into a patient through a gas passageway between the surgical instrument and a wall of the lumen. Instead, they simply disclose the introduction of gas through trocar channels 42 and 49 of trocars 32 and 30, respectively.

In sum, Trudel et al. do not anticipate the inventive method defined by amended Claims 9 and 15 of the subject application. Accordingly, Claims 9 and 15, and each of the rejected claims depending respectively therefrom, are patentable over Trudel et al. Withdrawal of the rejection of Claims 9-12, 15, 17 and 19 under 35 U.S.C. §102(e) is therefore respectfully requested.

Rejection Under 35 U.S.C. §103(a)

Claim 13 was rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,544,210 to Trudel et al. in view of U.S. Patent No. 4,735,603 to Goodson et al.

Claim 13 depends from amended Claim 9. The deficiencies of the smoke evacuation system disclosed by Trudel et al. are described in detail above with respect to Claim 9. Goodson et al. also disclose a laser smoke evacuation system for use in laparoscopic surgery. In Fig. 5 of Goodson et al., there is shown a system that includes a laparoscopic tube 53 for input of insufflation gas and a laparoscopic tube 54 for returning gas and smoke generated by a laser. According to Goodson et al., "laparoscope tube 53 is a standard available laser surgical instrument" and "laparoscope 54 also is a standard available laser surgical instrument." (see Col. 3, lns. 38-45). They are simply not novel devices.

In Fig. 6 of Goodson et al., there is shown a system that includes an a laparoscopic tube 55 for a laser, a laparoscopic tube 60 for inputting gas into a cavity and a laparoscopic tube 61 for the return of gas and smoke. According to Goodson et al., "[e]ach of the laparoscopic tubes 55, 60 and 61 are all standard available laser surgical instruments." (Col. 3, lns. 53-55). Again, the tubes are not novel. In any event, Goodson et al. fail to overcome the noted deficiencies of Trudel et al. In particular, neither Goodson et al. nor Trudel et al. disclose or suggest, either alone or in combination, in whole or in part, a method which includes, among others, the step of directing pressurized gas from a surgical instrument introduced through the lumen of a trocar into a patient through a passageway between the surgical instrument and a wall of the lumen.

Instead, both Trudel et al. and Goodson et al. disclose laparoscopic systems wherein gas is introduced to a cavity through a trocar in a conventional manner. Accordingly, amended

Claim 13 is not rendered obvious by the combination of Trudel et al. and Goodson et al.

Withdrawal of the rejection of Claim 13 under 35 U.S.C. §103(a) is therefore respectfully requested.

Claim 14 was rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,544,210 to Trudel et al. in view of U.S. Patent No. 6,942,671 to Smith.

Claim 14 depends from amended Claim 9. The deficiencies of Trudel et al. are described above with respect to Claim 9. Smith discloses a sealing apparatus for a trocar housing. Smith also discloses a surgical instrument 514 that passes through the sealing apparatus of the trocar housing. Smith fails however to disclose or suggest that surgical instrument 514 directs pressurized gas into the trocar. Accordingly, Smith fails to overcome the noted deficiencies of Trudel et al. Moreover, neither reference discloses or suggests, either alone or in combination, in whole or in part, the invention defined by amended Claim 14. Accordingly, amended Claim 14 is not rendered obvious by the combination of Trudel et al. and Goodson et al. Withdrawal of the rejection of Claim 14 under 35 U.S.C. §103(a) is therefore respectfully requested.

Claim 16 was rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,544,210 to Trudel et al. in view of U.S. Patent No. 5,203,767 to Cloyd.

Claim 16 depends from amended Claim 15. The deficiencies of Trudel et al. are described in detail above with respect to Claim 15. Cloyd discloses the use of a trocar and indicates that "[t]he trocar has a valve on the outer end to allow an instrument through and help maintain an air seal around instruments." In contrast, Claim 16 is directed to a method that includes, among others, the step of sealing the passageway of a trocar by forming a pressurized gas seal about a surgical instrument within the lumen of the trocar. There is nothing in Trudel et

al. or Cloyd that discloses or suggests such a methodology. Accordingly, amended Claim 16 is not rendered obvious by the combination of references cited by the Examiner. Withdrawal of the rejection of Claim 16 under 35 U.S.C. §103(a) is therefore respectfully requested.

Claim 18 was rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,544,210 to Trudel et al. in view of U.S. Patent No. 6,217,555 to Hart et al.

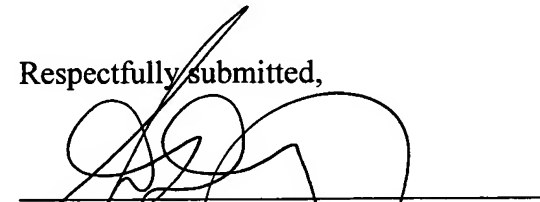
Claim 18 depends from amended Claim 15. The deficiencies of Trudel et al. are described above with respect to Claim 15. Hart et al. disclose a multiport trocar adapted for insertion of two or more instruments. The multiport trocar includes differently sized septum valves for each instrument. In use, referring to Fig. 3 of Hart et al., "insufflation of the abdominal cavity 17 is implemented by use of an insufflation tube 45 which is in fluid communication with the housing cavity 30 as well as the passage 18 of the cannula." (Col. 5, lns. 38-41). Thus, like Trudel et al., Hart et al. do not disclose or suggest a method of using a trocar that includes the step of directing pressurized gas from a surgical instrument introduced through the lumen of a trocar into a patient through a passageway between the surgical instrument and a wall of the lumen. Accordingly, Claim 18 is not rendered obvious by the combination of references cited by the Examiner. Withdrawal of the rejection of Claim 18 under 35 U.S.C. §103(a) is therefore respectfully requested.

CONCLUSION

It is respectfully submitted that all of the claims now under consideration in this application, namely Claims 9-21, are directed to patentable subject matter, and allowance thereof is earnestly solicited.

If the Examiner believes that a telephonic or personal interview would resolve any remaining or outstanding matters, the undersigned may be contacted at the telephone number provided below.

Respectfully submitted,



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